UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,336	04/25/2001	Joachim Manfred Bauer	DE920000021US1	7538

7590 10/13/2005	EXAMINER
William A. Kinnaman, Jr. IBM Corporation- M/S P386 2455 South Road Poughkeepsie, NY 12601	SMITH, PETER J

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 10/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	09/842,336	BAUER, JOACHIM MANFRED
Office Action Summary	Examiner	Art Unit
	Peter J. Smith	2176

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 August 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 7-05)   Office Action Summary   Part of Paper No./Mail Date 20051006

DETAILED ACTION

1.   This action is responsive to communications: amendment filed 8/1/2005.

2.   Claims 1-20 are pending in the case. Claims 1 and 14 are independent claims.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   **Claims 1, 3-6, 8-10, and 12-13 are rejected under 35 U.S.C. 102(e) as being**

anticipated by Gonzalez et al. (hereinafter "Gonzalez"), US 6,204,782 B1 filed 9/25/1998.

Regarding independent claim 1, Gonzalez discloses a source string of a plurality of

source characters encoded according to a source encoding scheme and converting the source

string into a target string encoded according to mixed codepages comprising a plurality of sub-

codepages in fig. 1-2, 7, the abstract, col. 2 lines 46-61, and col. 15 line 32 – col. 17 line 45.

Gonzalez discloses associating a predetermined processing priority with each sub-codepage

yielding a processing priority sequence and converting the characters strictly according to the

priority sequence in fig. 1 and 4, col. 6 lines 3-14, and col. 11 lines 7-19. Gonzalez discloses

using a single hardware instruction capable of processing a plurality of characters in a single

invocation of the instruction in fig. 7 and 10, and col. 15 line 32 – col. 17 line 45. Fig. 10 shows

the hardware implementation of Gonzalez and fig. 7 shows that only a single instruction is

needed to initialize and execute the multiple target coding selection processing at step 700 in fig.

7. All of the characters are of the source text block are converted by the process as shown in fig.

7 until the decision at step 730 indicates there are no characters left to process in the source text

block.

Under the broadest reasonable interpretation of the claimed invention, a single hardware

instruction can initiate a series of operations to process and convert the source characters.

Gonzalez shows that the single invocation of a hardware instruction initiates a series of

operations to process one or more characters until an end condition is reached. Therefore,

Gonzalez teaches converting one or more characters in the claimed single invocation of the

instruction.

Regarding dependent claim 3, Gonzalez discloses accessing the sub-codepages having

the highest priority which has not yet been accessed for a character if the character has not been

found in the current sub-codepage in fig. 7 and col. 15 line 32 – col. 17 line 46.

Regarding dependent claim 4, Gonzalez discloses wherein the hardware instruction is

an instruction for converting a source string of characters encoded according to the source

encoding scheme to a target string of characters encoded according to one of the sub-codepages

in fig. 7 and 10, and col. 15 line 32 – col. 17 line 45.

Regarding dependent claim 5, Gonzalez discloses that the priority sequence is

dynamically changed from a standard to an individual setting before running the code conversion

in fig. 5 and col. 13 lines 27-36.

Regarding dependent claim 6, Gonzalez discloses an installed program means for

performing the steps of a method according to claim 1 in fig. 10 and col. 2 lines 62-65.

Regarding dependent claim 8, Gonzalez discloses a chip means comprising hardware

circuits implementing at least parts of the steps of a method according to claim 1 in fig. 10 and

col. 2 lines 62-65.

Regarding dependent claim 9, Gonzales discloses a chip according to claim 8 in fig. 10

and col. 2 lines 62-65.

Regarding dependent claim 10, Gonzales discloses computer program code portions for

performing respective steps of the method according to claim 1 in fig. 10 and col. 2 lines 62-65.

Regarding dependent claim 12, Gonzalez discloses a computer readable program means

for causing a computer to perform the method of claim 1 in fig. 10 and col. 2 lines 62-65.

Regarding dependent claim 13, Gonzalez discloses wherein the source encoding

scheme is a Unicode encoding scheme in fig. 2 and col. 2 lines 46-48.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   **Claims 2, 7, 11, and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over Gonzalez et al. (hereinafter "Gonzalez"), US 6,204,782 B1 filed 9/25/1998.

Regarding dependent claim 2, Gonzalez teaches that the code conversion is performed

in an order according to a target list which prioritizes the target encodings in fig. 1 and 4, col. 6

lines 3-14, and col. 11 lines 7-19. Gonzalez teaches that the prioritization of the target list may

be either a default preference, preference of the application, or preference of the client in fig. 5

and col. 12 line 41 – col. 13 line 54. Gonzalez does not specifically state that the priority

sequence should be in order of highest probability to lowest probability. The Examiner believes

a natural preferred order of the target list of Gonzalez would have the most probable character

target encoding as the most preferred target encoding and the least probable character target

encoding as the least preferred target coding in the list sequence. Furthermore, it would have

been obvious to one of ordinary skill in the art at the time of the invention to have modified

Gonzalez to have prioritized the target encoding sequence to have the most probable target

encoding as the highest priority and the least probable target encoding as the lowest priority

because this would have resulted in the fastest conversion from the Unicode sequence to the

multiple encoding sequence because it would have resulted in the few conversion errors and

would have resulted in the fewest loops through the flow diagram of fig. 7 of Gonzalez.

Regarding dependent claim 7, Gonzalez does not specifically teach that the installed

program is resident on an Internet server. Gonzalez does teach a computer network connection

in fig. 10 which enables to Gonzalez to operate over a network medium like the Internet. The

Internet is globally accessible by people of various nationalities speaking and writing a plurality

of different languages. It would have been obvious to one of ordinary skill in the art at the time

the invention was made to have modified Gonzalez to have operated on an Internet server to

have provided character conversion services for the diverse Internet population.

Regarding dependent claim 11, Gonzalez does not specifically teach that the computer

program is a browser program. Gonzalez does teach a computer network connection in fig. 10

which enables to Gonzalez to operate in a browser to communicate with other computers. The

Internet is globally accessible by people of various nationalities speaking and writing a plurality

of different languages. It would have been obvious to one of ordinary skill in the art at the time

the invention was made to have modified Gonzalez to have operated in a browser program to

have provided character conversion services for the diverse Internet population.

Regarding independent claim 14, Gonzalez discloses a method for converting a source

string of source characters into a target string by first associating a predetermined priority with

each of the sub-codepages to produce a priority sequence ranging form a highest-priority sub-

codepage to a lowest-priority sub-codepage in fig. 1-2, 4, and 7, the abstract, col. 2 lines 46-61,

col. 6 lines 3-14, col. 11 lines 7-19, and col. 15 line 32 – col. 17 line 45. Gonzalez teaches

initially selecting the highest-priority sub-codepage as a current sub-codepage and converting

characters using the current sub-codepage in fig. 7 and col. 15 line 32 – col. 17 line 45.

Gonzalez teaches if a character is encountered that is not contained in the current sub-codepage,

then searching the other sub-codepages in priority order for a sub-codepage containing the

character in fig. 7 and col. 15 line 32 – col. 17 line 45. Gonzalez teaches two individual

approaches in fig. 7 and col. 15 line 32 – col. 17 line 45 wherein the first approach involves

continuing with conversion with the original sub-codepage as the current sub-codepage and

wherein the second approach involves continuing with conversion with the highest priority sub-

codepage as the current sub-codepage.

Gonzalez does not teach creating static first set of higher-priority sub-codepages and a

second static set of lower-priority sub-codepages. Rather, Gonzalez teaches a single highest-

priority sub-codepage in fig. 6 and col. 13 line 55 – col. 15 line 31. Gonzalez teaches the

characteristics of the claimed first and second sets, but specifically teaches them individually.

The first approach of Gonzalez teaches a set of sub-codepages which does not replace the current

sub-codepage, which corresponds to the second set of the claimed invention. The second

approach of Gonzalez teaches a set of sub-codepages which does replace the current sub-

codepage, which corresponds to the first set of the claimed invention. It would have been

obvious and desirable to have modified Gonzalez to have created the claimed invention to have

created a high-priority sub-codepage set instead of only a highest-priority sub-codepage so that a

block of source text including two major sub-codepages could have translated both of the high-

priority sub-codepages of the source text string according to the first approach as taught by

Gonzalez in fig. 7 and col. 15 line 32 – col. 17 line 45. Therefore, the first set of sub-codepages

would have been subject to the second approach taught by Gonzalez and the second set of sub-

codepages would have been subject to the first approach taught by Gonzalez.

Regarding dependent claim 15, Gonzalez teaches that the code conversion is performed

in an order according to a target list which prioritizes the target encodings in fig. 1 and 4, col. 6

lines 3-14, and col. 11 lines 7-19. Gonzalez teaches that the prioritization of the target list may

be either a default preference, preference of the application, or preference of the client in fig. 5

and col. 12 line 41 – col. 13 line 54. Gonzalez does not specifically state that the priority

sequence should be in order of highest probability to lowest probability. The Examiner believes

a natural preferred order of the target list of Gonzalez would have the most probable character

target encoding as the most preferred target encoding and the least probable character target

encoding as the least preferred target coding in the list sequence. Furthermore, it would have

been obvious to one of ordinary skill in the art at the time of the invention to have modified

Gonzalez to have prioritized the target encoding sequence to have the most probable target

encoding as the highest priority and the least probable target encoding as the lowest priority

because this would have resulted in the fastest conversion from the Unicode sequence to the

multiple encoding sequence because it would have resulted in the few conversion errors and

would have resulted in the fewest loops through the flow diagram of fig. 7 of Gonzalez.

Regarding dependent claim 16, Gonzalez discloses that the priority sequence is

dynamically changed from a standard to an individual setting before running the code conversion

in fig. 5 and col. 13 lines 27-36.

Regarding dependent claim 17, Gonzalez discloses an installed program means for

performing the steps of a method according to claim 14 in fig. 10 and col. 2 lines 62-65.

Regarding dependent claim 18, Gonzalez discloses a chip means comprising hardware

circuits implementing at least parts of the steps of a method according to claim 14 in fig. 10 and

col. 2 lines 62-65.

Regarding dependent claim 19, Gonzales discloses computer program code portions for

performing respective steps of the method according to claim 1 in fig. 10 and col. 2 lines 62-65.

Regarding dependent claim 20, Gonzalez discloses wherein the source encoding

scheme is a Unicode encoding scheme in fig. 2 and col. 2 lines 46-48.

Response to Arguments

7.   Applicant's arguments filed 8/1/2005 have been fully considered but they are not

persuasive. Regarding Applicant's argument that Gonzalez et al. (hereinafter "Gonzalez") does

not teach all of the limitations of independent claim 1, the Examiner respectfully disagrees. The

Examiner's arguments in the previous office action and again this action are directed towards the

broadest reasonable scope of a single hardware instruction capable of processing a plurality of

characters in a single invocation of the instruction. The Examiner notes, for example, that the

Translate Two to One (TRTO) instruction referenced by Applicant in the remarks page 6 appears

to be performing a series of operations in response to the invocation of the hardware instruction.

Specifically, the Examiner notes that "each function character selected from the translation table

is compared to a test character in general register 0, and, unless an equal comparison occurs, is

placed at the first-operand location." The Examiner also notes that "the operation proceeds until

a selected function character equal to the test character is encountered, the end of the second

operand is reached, or a CPU-determined number of characters have been processed." It appears

to the Examiner that the TRTO instruction described here serially performs comparisons between

function characters and the test character until one of the end conditions in reached. Thus, the

Examiner believes Gonzalez likewise performs a serial processing of a plurality of characters

using a single hardware instruction as is claimed. It is for these reasons that the Examiner

maintains that Gonzalez discloses all of the limitations of independent claim 1.

Regarding Applicant's arguments in pages 8 and 9 that Gonzalez does not teach or

suggest all of the limitations of independent claim 14, the Examiner respectfully disagrees. The

Examiner's intention is to take the position that Gonzalez renders obvious the invention as

defined in claim 14. The Examiner believes Gonzalez exactly teaches the characteristics of the

claimed first and second sets, but specifically teaches them individually. In other words,

Gonzalez teaches a current sub-codepage and a single set of other sub-codepages. However,

Gonzalez teaches in fig. 7 and col. 16 lines 48-53 that the set of other sub-codepages can be

treated according to a first approach or a second approach. The first approach of Gonzalez

teaches a set of sub-codepages which does not replace the current sub-codepage and this

corresponds to the second set of the claimed invention. The second approach of Gonzalez

teaches a set of sub-codepages which does replace the current sub-codepage and this corresponds

to the first set of the claimed invention. Thus, the modification the Examiner proposes to

Gonzalez is to use the first and second approach together. By using the first and second

approach together, two sets of sub-codepages would have been created, each corresponding to

one approach. Therefore, such a modification to Gonzalez, using teachings of Gonzalez, would

have created the claimed first and second sets which then has the advantages of both the first and

second approaches taught by Gonzalez. It is for these reasons that the Examiner maintains that

Gonzalez teaches and suggests all of the limitations as presented in independent claim 14.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Adam, Glenn, "Internationalization and Character Set Standards", StandardView

Vol. 1, No. 1, September 1993, pages 31-39 discloses internationalized software which can

support the needs of many native user languages.

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a)..

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Peter J. Smith whose telephone number is 571-272-4101. The

examiner can normally be reached on Mondays-Fridays 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PJS
10/11/2005

WILLIAM BASHORE
PRIMARY EXAMINER

11/11/2005